REMARKS

Applicant has received and carefully reviewed the Office Action of the Examiner mailed December 12, 2007. Currently, claims 1-40 and 44 remain pending. Claims 1-8, 10-15, 19-21, 24-29, 33-34, 38-40, and 44 have been rejected with the remainder of the claims withdrawn following an Examiner induced restriction requirement. With this paper, claims 15, 19, 29, and 33 have been amended and claims 45 and 46 have been added. Support for the amendments may be found in the specification, claims and drawings as filed. No new matter has been added. Favorable consideration of the following remarks is respectfully requested.

Claims 7, 15, 19, 29, and 33 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully traverses this rejection.

The Examiner asserts that the disclosure filed on July 10, 2003 does not describe "a connector blends the first flexibility with the second flexibility." This is not correct, as support for this limitation can be found in the originally filed specification. For example, page 17, lines 17-23 of the application, which describe Figure 3, recite:

> For example, proximal section 26 may comprise a first material having a first flexibility and distal section 28 may comprise a second (differing) material having a second flexibility. By overlapping ends 64/66 the differing flexibilities, the transition between flexibility can be made to be more gradual. The overlapping joint, thus, blends the stiffness of proximal section 26 and distal section 28 by combining the properties of each end section 64/66 making up the cross section of the overlapping joint.

When this excerpt is read in conjunction with Figure 3, one will see that the connector is located over the overlapping joint described above. Withdrawal of the rejection is respectfully requested.

The Examiner asserts that the disclosure filed on July 10, 2003 does not describe "a reduced size portion is defined at least one of the distal end of the proximal region and the proximal end of the distal region, and where both the proximal region and distal region include a reduced size portion as recited in claims 29 and 33." The claims have been amended to use the term "cross sectional area" in place of "size portion" for clarity. Support for this limitation can be found in the specification as filed. For example, page 17, lines 3-6 of the application recite, "In the tapered embodiments illustrated in Figures 2 – 4, the ends

64/66 may be tapered or otherwise formed to have a mating geometry that gradually decreases in cross sectional area toward the middle of connector 30." Figure 5 of the present application shows one embodiment of a reduced cross sectional area toward the middle of connector 30. Withdrawal of the rejection is respectfully requested.

Claims 1-2, 4-5, 8, 10, 13, 20-21, 24, 27, 34, 38-40, and 44 are rejected under 35 U.S.C. §102(e) as being anticipated by Gray et al. (US 6,461, 370). Applicant respectfully traverses this rejection. In order to anticipate, the cited reference must disclose each and every claimed element. Gray et al. fail to do so.

Claim 1 recites:

> A medical device, comprising:
> an elongate shaft including a longitudinally extending proximal section having a distal end, a longitudinally extending distal section having a proximal end, and a connector connecting the proximal section and the distal section of the elongate shaft, wherein the connector is fixedly secured to both the proximal section and the distal section, securing the distal end of the proximal section with the proximal end of the distal section; and
> a filter coupled to the shaft.

The claimed invention requires that a connector fixedly secures the proximal section of the elongate shaft to the distal section of the elongate shaft. A distinct filter is coupled to the shaft. Gray et al. do not disclose these claimed features, and thus cannot be considered as anticipatory.

As can be seen, claim 1 recites a connector and a filter as separate, distinct elements. Gray et al. do not disclose a connector and a filter. Instead, Gray et al. appear to describe only a filter. Indeed, the Examiner as pointed to various parts of the filter as allegedly being the claimed connector and the claimed filter. However, Gray et al. describe these elements (see column 4, line 66 through column 5, line 2) as

> With further reference to FIGS. 2 through 5, the filter 50 comprises a braided basket 52 having respective inner and outer braid layers 54 and 56 (FIG. 5) that, in one embodiment, serve as supports for a fine filter mesh 58.

Clearly, element 56 of Gray et al. is merely a component of the filter 50 and thus cannot be considered as being a distinct connector as is currently claimed. If element 50 is considered as a filter, Gray et al. fail to disclose the claimed connector. If element 50 is

considered as a connector (a point not conceded by Applicant), Gray et al. fail to disclose the claimed filter. In either event, the cited reference fails to disclose each and every claimed feature and thus cannot be considered as anticipating claim 1. Reconsideration and withdrawal of the rejection is respectfully requested. Applicants submit that claims 2, 4-5, and 8 are also in condition for allowance as they depend from claim 1 and add significant limitations to further distinguish them from the prior art.

Claim 10 recites:

> An embolic protection filtering device, comprising:
>
> a filter wire including a core member, the core member including a proximal region and a distal region, the proximal region comprising a first material and including a distal end, the distal region comprising a second material different from the first material and including a proximal end;
>
> a connector disposed over the distal end of the proximal region and the proximal end of the distal region, the connector fixedly secured to each of the proximal and distal regions of the core member; and
>
> a filter assembly coupled to the filter wire, the filter assembly including a filter frame and a filter membrane coupled to the filter.

Similar to claim 1, claim 10 requires that a connector connects the proximal and distal parts of the core member, and is fixedly secured to both. Claim 10 also requires that there is a filter assembly coupled to the filter wire. Gray et al. do not disclose these claimed features, and thus cannot be considered as anticipatory. As discussed above, Gray et al. fail to disclose a connector and a filter as separate members. Thus, Gray et al. cannot be considered as anticipating the claimed invention.

Moreover, the claimed invention requires that the connector be fixedly secured to each of the proximal and distal regions of the core member. The Examiner has pointed to element 38 as the proximal section and element 66 as the distal section. However, these elements appear to be outer tubular members, not portions of a core member. Thus, Gray et al. cannot be considered as describing a connector that connects the proximal and distal parts of a core member. Indeed, as noted above, Gray et al. cannot be considered as even disclosing the claimed connector. Reconsideration and withdrawal of the rejection is respectfully requested. Applicants submit that claims 13 and 20-21 are also in condition for allowance as they depend from claim 10 and add significant limitations to further distinguish them from the prior art.

Claim 24 recites:

An embolic protection filtering device, comprising:

a filter wire including a core member and a covering disposed over at least a portion of the core member, the core member including a proximal portion and a distal portion, the proximal portion having a first flexibility and including a distal end, the distal portion having a second flexibility different from the first flexibility and including a proximal end;

a connector disposed over the distal end of the proximal portion and the proximal end of the distal portion, the connector fixedly secured to each of the proximal and distal portions of the core member; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame, a filter membrane coupled to the filter frame, and one or more struts extending between the filter frame and the filter wire.

Similar to claims 1 and 10, claim 24 requires that a connector connects the proximal and distal parts of the core member, and is fixedly secured to both as well as that the filter assembly is coupled to the filter wire. Claim 24 also recites that there are one or more struts extending between the filter frame and the filter wire. Gray et al. do not disclose these claimed features, and thus cannot be considered as anticipatory.

For at least the reasons discussed above with respect to claims 1 and 10, Gray et al. fail to disclose a connector and a filter as separate members and that the connector is connected to the core member. Further, Gray et al. do not appear to disclose that there are one or more struts extending between the filter frame and the filter wire. The Examiner asserts that member 52 of Gray et al. is a strut. However, Gray et al. appear to disclose that member 52 is a braided basket. One of ordinary skill in the art would not equate a strut with a braided basket. Gray et al. do not appear to disclose one or more struts extending between the filter frame and the filter wire. This is a claimed feature missing from the cited art.

Thus, Gray et al. cannot be considered as anticipating the claimed invention. Reconsideration and withdrawal of the rejection is respectfully requested. Applicants submit that claims 27, 34, and 38 are also in condition for allowance as they depend from claim 24 and add significant limitations to further distinguish them from the prior art.

Claim 39 recites:

An embolic protection filtering device, comprising:

a filter wire including a core member and a covering disposed over at least a portion of the core member, the core member including a proximal region and a distal region, the proximal region comprising a first material and

including a distal end, the distal region comprising a second material different from the first material and including a proximal end;

means for securing the proximal region with the distal region; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame, a filter membrane coupled to the filter frame, and one or more struts extending between the filter frame and the filter wire.

The claimed invention requires that the device includes a means for securing the proximal region of the core member with the distal region of the core member and that there are one or more struts extending between the filter frame and the filter wire. Gray et al. do not disclose these claimed features, and thus cannot be considered as anticipatory.

Gray et al. do not appear to disclose securing a proximal region of a core member with a distal region of a core member. As discussed above, the filter of Gray et al. appears to attach to a tubular shaft 38 and coil spring 66 and not a core member. For at least the reasons discussed above with respect to claim 24, Gray et al. fail to disclose that there are one or more struts extending between the filter frame and the filter wire. These are claimed feature missing from the cited art. Thus, Gray et al. cannot be considered as anticipating the claimed invention. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 40 recites:

An embolic protection filtering device, comprising:

a filter wire including a core member and a covering disposed over at least a portion of the core member, the core member including a proximal portion and a distal portion, the proximal portion having a first flexibility and including a distal end, the distal portion comprising a second flexibility different from the first flexibility and including a proximal end;

means for blending the first flexibility with the second flexibility; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame, a filter membrane coupled to the filter frame, and one or more struts extending between the filter frame and the filter wire.

The claimed invention requires that the device includes a core member having a proximal portion with a first flexibility and a distal portion with a second flexibility, a means for blending the first flexibility with the second flexibility and one or more struts extending between the filter frame and the filter wire. Gray et al. do not disclose these claimed features, and thus cannot be considered as anticipatory.

Gray et al. do not appear to disclose a core member having a proximal portion with a first flexibility and a distal portion with a second flexibility. Further, since Gray et al. do not appear to disclose a first and second flexibility, Gray et al. cannot be considered as disclosing a means for blending the first flexibility with the second flexibility. Also, as discussed above Gray et al. do not disclose one or more struts extending between the filter frame and the filter wire. These are claimed feature missing from the cited art. Thus, Gray et al. cannot be considered as anticipating the claimed invention. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 44 recites:

> A method of using a medical device, comprising:
>
> providing a filtering device, the filtering device including an elongate shaft having a filter coupled thereto, the shaft including a longitudinally extending proximal section having a distal end, a longitudinally extending distal section having a proximal end, and a connector connecting the proximal section and the distal section of the shaft, wherein the connector is fixedly secured to both the proximal section and the distal section, securing the distal end of the proximal section with the proximal end of the distal section;
>
> inserting the filtering device into a blood vessel;
>
> advancing the filtering device through the blood vessel to a location adjacent a target region; and
>
> deploying the filter.

The claimed method requires that a filtering device is provided that has a connector which connects the proximal and distal parts of the shaft, and is fixedly secured to both. As discussed above, Gray et al. do not disclose such a device and thus cannot be considered to disclose the claimed method step of providing such a device. At a minimum, Gray et al. do not disclose this claimed method step, and thus cannot be considered as anticipatory. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 3, 6, 7, 9, 11, 12, 14, 25, 26, and 28 are rejected under 35 U.S.C §103(a) as being unpatentable over Gray et al. (US 6,461,370). Applicants respectfully traverse the rejection. Claims 1, 10, and 24 from which the above claims depend, are distinguished above as being patentable over Gray et al. Claims 3, 6, 7, 9, 11, 12, 14, 25, 26, and 28 include the elements of claims 1, 10, and 24 respectively and also add further distinguishing features and thus is patentable for at least the same reasons as claims 1, 10, and 24. Favorable reconsideration is respectfully requested.

Reexamination and reconsideration are requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is also respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Lawrence Wasicek

By his attorney,

Date: March 5, 2008

Glenn M. Seager, Reg. No. 36,926
CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, Minnesota 55403-2420
Telephone: (612) 677-9050
Facsimile: (612) 359-9349